

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 182 (LAYHILL ROAD) AT MIDDLEVALE LANE IN MONTGOMERY COUNTY.

INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED CABINET IS INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 4 NEMA PHASES. THE NEMA PHASING SHALL BE MODIFIED TO INCLUDE NEW NEMA PHASES 4 AND 8 FOR THE EAST AND WEST BOUND APPROACHES. AUDIBLE PEDESTRIAN SIGNALS SHALL BE INSTALLED AT THE INTERSECTION FOR THE PEDESTRIAN CROSSINGS OF MD 182 (LAYHILL ROAD). VEHICULAR TRAFFIC SIGNAL HEAD SECTIONS SHALL BE UPGRADED TO BLACK FACE FOR ALL INTERSECTION APPROACHES.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JEFFERY WENTZ, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358, (301) 513-7318
MR. KEVIN NOWAK, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7336
MR. WAYNE A. MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304
MR. AUGIE REBISH, UTILITY ENGINEER
PHONE: (301) 513-7350
MR. KAMAL HAMUD, TRAFFIC ENGINEER MCDPW&T
PHONE: (240) 777-2190
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. KEITH LORD, MONTGOMERY COUNTY DPW&T
PHONE: (301) 279-1971

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
9002	NEMA LOAD SWITCH	EA	1
9570	SHEET ALUMINUM GROUND MOUNT SIGN W11-2 (36" X 36") SHIELD ASSEMBLY (30" X 51")	SF	47
9571	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN SHIELD ASSEMBLY (48" X 75") R10-4(1) "Layhill Road"	SF	29
9572	SHEET ALUMINUM SPAN MOUNTED SIGN D- 3(1) (VAR. X 16")	SF	10

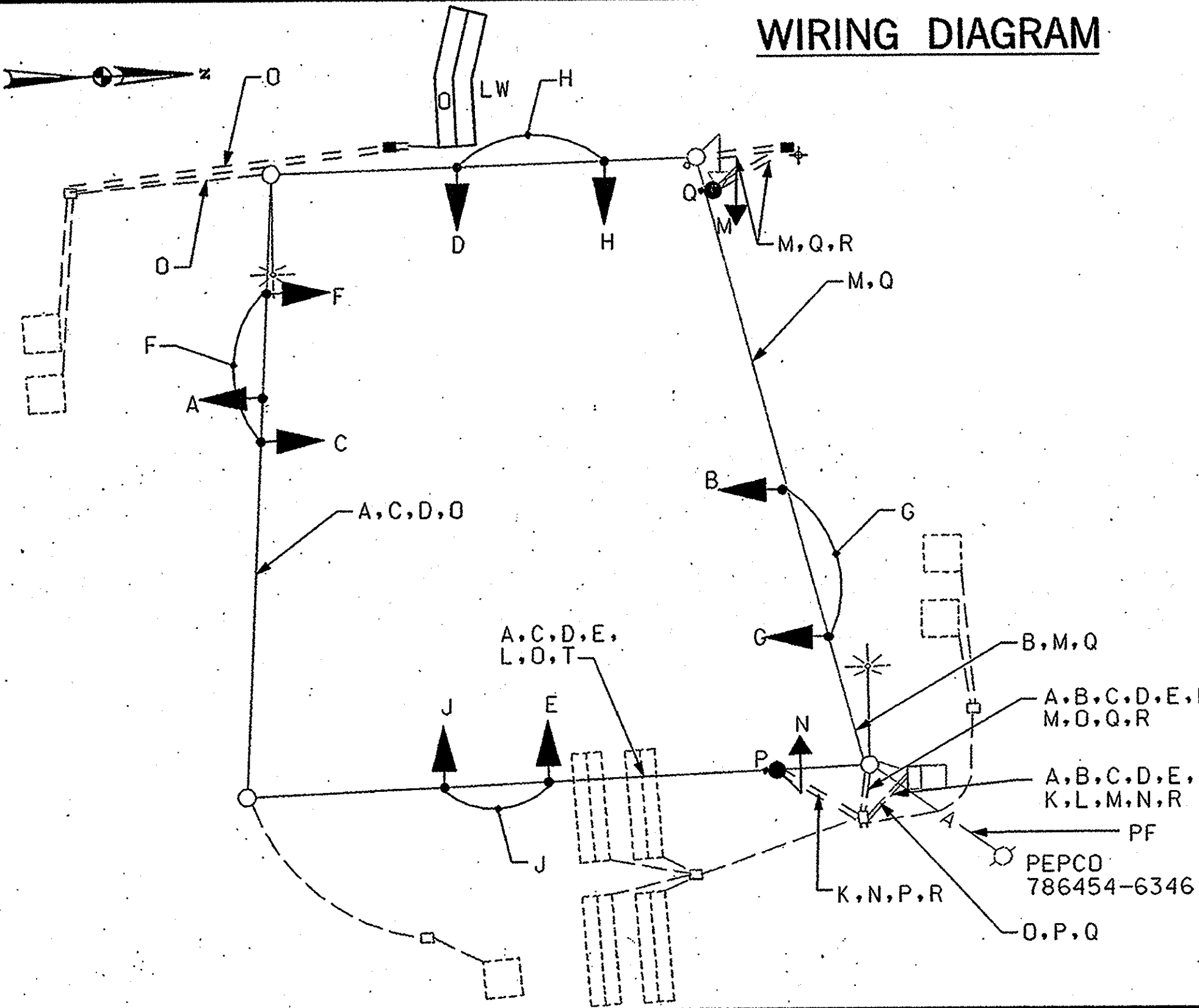
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
2002	TEST PIT EXCAVATION	CY	2
5003	F&I 12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	275
5004	F&I 24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	12
5005	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS ANY WIDTH	LF	440
6003	F&I 4 INCH CONCRETE SIDEWALK	SF	250
8002	12 INCH VEHICULAR RED OR GREEN LED TRAFFIC SIGNAL HEAD SECTION	EA	18
8003	12 INCH VEHICULAR YELLOW LED TRAFFIC SIGNAL HEAD SECTION	EA	9
8006	F&I 2 WIRE CENTRAL CONTROL UNIT	EA	1
8014	F&I AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGN	EA	2
8015	F&I STEEL PEDESTAL POLE WITH BREAKAWAY BASE	EA	2
8016	F&I PVC CONDUIT BEND IN EXISTING BASE	EA	1
8024	F&I 16 INCH PEDESTRIAN LED COUNTDOWN SIGNAL HEAD SECTION - POLE MOUNT	EA	2
8028	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1
8037	F&I DETECTABLE WARNING SURFACES	SF	20
8038	RELOCATE EXISTING SIGN	SF	10
8040	F&I CONCRETE FOR SIGNAL FOUNDATIONS	CY	2
8042	F&I WOOD SIGN SUPPORTS 4 INCH X 6 INCH	SF	20
8043	F&I NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	425
8049	F&I 3 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	110
8054	F&I 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	LF	5
8063	INSTALL GROUND MOUNTED SIGN	SF	47
8064	INSTALL OVERHEAD SIGN	SF	39
8062	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	2
8070	F&I GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH	EA	2
8075	F&I ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)	LF	350
8076	F&I ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	350
8078	F&I ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	375
8080	F&I LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)	LF	450
8081	SAW CUT FOR SIGNAL LOOP DETECTOR	LF	120
8085	FURNISH AND INSTALL STEEL SPAN WIRE 1/4" IN DIAMETER	LF	500

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

WIRING DIAGRAM



KEY

- A, B, C, D, E } USE EXISTING 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- F, G, H, J } USE EXISTING 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- M, N } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- O } 2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
- P, Q } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- R } 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
- LW } LOOP WIRE
- PF } EXISTING POWER FEED
- + } GROUND ROD

PHASE CHART



1	2	3	4	5	6	7	8	9	10	11
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)

PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	DW	DW	
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	
PHASE 4 AND 8	R	R	R	R	R	G	G	G	G	DW	DW	
4 AND 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	
PHASE 4 AND 8 ALT	R	R	R	R	R	G	G	G	G	WK	WK	
PED CLEARANCE / COUNTDOWN	R	R	R	R	R	G	G	G	G	FL/DW	FL/DW	
4 AND 8 ALT CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 182 (LAYHILL ROAD) AND
MIDDLEVALE LANE
LAYHILL, MARYLAND

GENERAL INFORMATION PLAN

SCALE N.T.S. DATE 05/01/2006 CONTRACT NO. AT7825185

DESIGNED BY S. SMITH COUNTY MONTGOMERY
DRAWN BY L. YEH LOGMILE 15018201.55
CHECKED BY S. RENZI T.I.M.S. NO. H093
F.A.P. NO. TOD NO.

TS NO. 32758 DRAWING PSG OF N001 SHEET NO. 2 OF 2



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